

**REMARKS/ARGUMENTS*****Brief Summary of Status***

Claims 1-29 and 68-83 are pending in the application.

Claims 1-29 and 68-83 are rejected.

***Claim rejections - 35 U.S.C. § 103***

In the above-referenced office action, the Examiner asserts the following:

“5. Claims 1, 4-6, 10, 11, 68, and 73 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shaffner et al. US 6,104,908 in view of Kummer US 6,151,479.” (office action, Part of Paper No./Mail Date 20091030, p. 3)

The Applicant respectfully traverses.

The Examiner equivalences a singular functional block (i.e., Examiner-identified transmodulator 22 of Shaffner’s FIG. 2) within at least two separate elements within Applicant’s claimed subject matter in independent claims 1 and 68, namely, a satellite receiver that is operative to decode the first signal having the first signal type; a modulator, connected to an output of the satellite receiver, that is operative to modulate decoded output from the satellite receiver.

The Applicant claims two separate and distinct components (e.g., a satellite and a modulator), and the Applicant respectfully asserts that it is inappropriate for the Examiner to equivalence a singular component (i.e., Examiner-identified transmodulator 22 of Shaffner’s FIG. 2) with both of them.

Also, there is no decoding performed within the Examiner-identified transmodulator 22 of Shaffner’s FIG. 2. With respect to Shaffner, the Applicant respectfully points out that decoding performed therein is performed in the demodulator/demodulating means 30 or the MDU-IRD 32, both of which are located well after the Examiner-identified transmodulator 22 of Shaffner’s FIG. 2, and are in fact located within “dwelling 12” and are not even located within “system 14” that includes Examiner-identified transmodulator 22.

Again, the Shaffner’s “system 14” and “dwelling 12” are two separate and distinct systems; “dwelling 12” provides television channels to each of the “dwelling 12” via the

“distribution network 20”. The Shaffner’s “system 14” and “dwelling 12” are not included within any single apparatus. There is no decoding performed in Shaffner’s “system 14”. In contradistinction, decoding is performed in the “demodulator 30 [that] must be provided with means for decoding the local television channel signals”, and the “demodulator 30” is remotely located in the “dwelling 12” (i.e., remote with respect to the “system 14”).

Also, the Examiner-identified transmodulator 22 of Shaffner’s FIG. 2 does not perform encoding in accordance with the subject matter as claimed by the Applicant. The Applicant’s modulator is a singular component that is operative to perform encoding and modulation therein.

In fact, the decoding performed in those components in Shaffner (i.e., in the “dwelling 12” that is remotely located and not the same apparatus as the “system 14”, those two components being separated by the “distribution network 20”) is to provide a signal via “an output 38 adapted for connection to a television set for selectively providing a particular television channel selected by a user ...” (Shaffer, col. 5, lines 23-26, emphasis added)

Shaffner’s transmodulator 22 does not perform decoding on the signal provided thereto to generate any decoded output there from. There is no decoding performed in Shaffner’s “system 14” at all. Any decoding in Shaffner is performed not in Shaffner’s transmodulator 22 (included in “system 14”), but decoding is instead performed within “dwelling 12”. There is no decoding performed in Shaffner’s “system 14” that includes Examiner-identified transmodulator 22.

“The demodulating means may comprise a demodulator in combination with a decoder for developing, from the second transmodulated signal [that is output from the a transmodulator], a demodulated signal having the second modulation type ...” (Shaffer, col. 2, lines 53-54, emphasis added) The Applicant respectfully points out that Shaffner’s transmodulator is the component that generates “the second transmodulated signal”. As can be seen, any decoding in Shaffer is performed on “the second transmodulated signal”, and as such, any decoding is therefore performed on a signal that was long since output from Shaffner’s transmodulator and then passed through diplexer 24, distribution network 20, wire-based distribution system 27, etc. Decoding is not performed in

Shaffner's transmodulator, but is instead performed [as explicitly described in Shaffner] within Shaffner's demodulator/demodulating means 30 or the MDU-IRD 32.

"The demodulated signal, in turn, is coupled to a multiple-dwelling unit integrated receiver/decoder or MDU-IRD 32. The MDU-IRD 32 is a special type of integrated receiver/decoder (IRD) ..." (Shaffer, col. 4, lines 51-54, emphasis added)

"In addition, if the local television channel signals are digitized in an FSK or PSK modulation format, then the demodulator 30 must be provided with means for decoding the local television channel signals as well as means for tuning in to a particular one of those channels. Of course, the functionality of the local channel demodulator 30 (with or without a decoding capability) could be integrated into the MDU-IRD 32, if desired." (Shaffer, col. 5, lines 7-14, emphasis added)

However, with respect to Shaffner's FIG. 2, demodulator/demodulating means 30 and/or MDU-IRD 32 may perform decoding, but those two functional blocks are located well after the Examiner-identified transmodulator 22, and are in fact located within "dwelling 12" and are not even located within "system 14" that includes Examiner-identified transmodulator 22.

The Applicant respectfully asserts that one having skill in the art to which the invention pertains would comprehend and understand the decoding performed Shaffer is not performed within the Examiner-identified transmodulator 22 in Shaffner.

The Examiner-identified transmodulator 22 instead translates from one modulation type to another, but it does not perform decoding of a signal provided to it. Specifically, the Examiner-identified transmodulator 22 is operative to translate a QPSK signal received by antenna 16 to a QAM signal. (e.g., "The transmodulator 22 develops a first transmodulated signal (a QAM signal) having a quadrature amplitude modulated or QAM modulation format from the QPSK signal received by the satellite signal receiving antenna 16" as described in Shaffer, col. 3, lines 50-53, emphasis added or "QAM signal developed by the transmodulator 22" as described in Shaffer, col. 4, lines 16-17, emphasis added).

This translation of modulation in Shaffer's transmodulator 22 is not the same as the subject matter as claimed by the Applicant of a satellite receiver that is operative to decode the first signal having the first signal type; a modulator, connected to an output of

the satellite receiver, that is operative to modulate decoded output from the satellite receiver.

In contradistinction, the decoding performed within Shaffner is performed in the demodulator/demodulating means 30 or the MDU-IRD 32, and this being performed in a transmodulated signal generated from Shaffer's transmodulator 22 and/or transmodulator 26 that may get combined in Shaffner's diplexer 24 and distributed via distribution network 20. Therefore, at a minimum, the decoding performed within Shaffner is performed after any operations within Shaffer's transmodulator 22 and/or transmodulator 26 (which perform no decoding therein themselves).

Also, Shaffner's other transmodulator 26 does not perform any decoding, but instead translates from one modulation type to another such as from VHF/UHF modulation to a FM, FSK, or PSK modulation (e.g., such as described in "A transmodulator 26 transmodulates the amplitude-modulated local television channel signals received by the VHF/UHF antenna 18 to develop a second transmodulated signal having a modulation format such as frequency modulation (FM), frequency shift key (FSK) modulation, or phase shift key (PSK) modulation." as described in Shaffer, col. 4, lines 1-6, emphasis added) Instead, with respect to Shaffner's FIG. 2, demodulator/demodulating means 30 or MDU-IRD 32 may perform decoding, but those two functional blocks are located well after the Shaffner's transmodulator 26 as well. Again, any decoding in Shaffner is performed within "dwelling 12" and is not even performed within "system 14" that includes transmodulator 26.

The Applicant respectfully asserts that the Examiner appears to be reading subject matter limitations into Shaffer's transmodulator 22 (e.g., decoding functionality that is not disclosed with respect to Shaffer's transmodulator 22), when Shaffer instead teaches and discloses decoding functionality explicitly with respect to other devices therein altogether (e.g., demodulator/demodulating means 30 or MDU-IRD 32) that operate to generate "an output 38 adapted for connection to a television set for selectively providing a particular television channel selected by a user ...". Again, any decoding of Shaffner is performed well after any operations performed by Shaffner's transmodulator 22 or transmodulator 26, and such decoding is performed within "dwelling 12" and not even performed within "system 14" that includes transmodulator 22 and/or transmodulator 26.

As can be seen in Shaffner, there is no modulating of the signal provided via “output 38 adapted for connection to a television set” (i.e., the decoded signal is provided directly to the “television set” without any modulating even being needed to be performed to that signal provided via “output 38”).

Moreover, the decoding in Shaffner, as explicitly being taught and disclosed as being performed within demodulator/demodulating means 30 or MDU-IRD 32 are both located in “dwelling 12”, which is explicitly shown as being a separate and distinct “system 14 for providing television channel signals to each of the dwellings 12”. However, the Examiner-identified Shaffner’s transmodulator 22 is included within “system 14” in Shaffner’s FIG. 2, but no decoding is performed in Shaffner’s “system 14”.

As such, the Applicant again respectfully asserts that any decoding in Shaffner is explicitly described as being performed in a component (i.e., “demodulator/demodulating means 30 or MDU-IRD 32” located within “dwelling 12”) that is separate and distinct from the “system 14” that includes Examiner-identified Shaffner’s transmodulator 22. Again, decoding in Shaffner is explicitly described as being performed in a component that is separate and distinct from the Examiner-identified Shaffner’s transmodulator 22.

Therefore, the Applicant respectfully asserts that Shaffner fails to teach and disclose the Applicant’s subject matter limitations as the Examiner asserts in the office action.

On page 4 of the office action, the Examiner asserts that Shaffner teaches and discloses “wherein the first signal type includes a first modulation, a first code rate, a first symbol rate, and a first data rate; [col. 3 lines 42 - col. 4 lines 20; col. 4 lines 33-66; col. 2 lines 30-44] and wherein the second signal type includes at least one of a second modulation, a second code rate, a second symbol rate, and a second data rate. [col. 3 lines 42 - col. 4 lines 20; col. 4 lines 33-66; col. 2 lines 30-44]”.

These Examiner-cited portions of Shaffner deal only with translation of modulation (e.g., converting a “first received QPSK television signal to a first transmodulated signal having a first modulation format such as quadrature amplitude modulation (QAM)”, converting a second signal “to a second transmodulated signal having a second modulation format such as frequency modulation (FM), frequency-shift

key (FSK) modulation, or phase-shift key (PSK) modulation.”). See also the TITLE and ABSTRACT of Shaffner with respect to “diverse modulation types” (TITLE), “respective, first and second, different modulation types” to be transmodulated to “develop first and second transmodulated signals” (ABSTRACT).

The Applicant respectfully points out that the Applicant’s claimed first signal includes a first modulation, a first code rate, a first symbol rate, and a first data rate (i.e., the first signal includes all four of these components: a first modulation, a first code rate, a first symbol rate, and a first data rate). Also, the Applicant respectfully points out that the Applicant’s claimed second signal includes a second modulation, a second code rate, a second symbol rate, and a second data rate (i.e., the second signal includes all four of these components: a second modulation, a second code rate, a second symbol rate, and a second data rate).

While Shaffner does deal with modulation, the Applicant is unable to find any mention of symbol rate, data rate, or code rate within the Examiner-identified portions of Shaffner (i.e., “col. 3 lines 42 - col. 4 lines 20; col. 4 lines 33-66; col. 2 lines 30-44”). The Applicant respectfully requests that the Examiner specifically identify where such teaching and disclosure of symbol rate, data rate, and code rate is taught and disclosed in Shaffner.

On page 4 of the office action, the Examiner includes Kummer in an effort to overcome the deficiencies of Shaffner (i.e., “Kummer teaches a modulator and a DAC (Digital to Analog Converter) that is operable to transform the second signal having the second signal type from a digital signal into an analog signal. [fig. 1 (1) - modulator, (7) - DAC; col. 2 lines 7-19]”).

The Examiner equivalences Kummer’s “tuner & demodulator 1” with Applicant’s claimed a modulator, connected to an output of the satellite receiver, that is operative to modulate decoded output from the satellite receiver, and the Examiner equivalences Kummer’s “Video DAC 7” with Applicant’s claimed DAC (Digital to Analog Converter), connected to an output of the modulator, that is operative to transform the second signal having the second signal type from a digital signal into an analog signal.

The Applicant respectfully points out that Kummer's "tuner & demodulator 1" performs demodulation (i.e., using "demodulation techniques"); it does not perform modulation.

Kummer teaches and discloses:

"Next the signal is sent to the tuner and demodulator 1, where a particular channel out of a possible 10 per frequency is obtained by the tuner from the broadband satellite transmission and then separated from the carrier signal by demodulation techniques." (Kummer, col. 2, lines 11-16, emphasis added)

"The desired channel is stripped from the main carrier by the tuner and demodulator 1 and sent to the ASIC 12 where the audio packets are separated from the main data stream, synchronized and demultiplexed." (Kummer, col. 4, lines 1-4, emphasis added)

The Applicant respectfully points out that Kummer's "tuner & demodulator 1" operates to extract a signal "separated from the carrier signal by demodulation techniques" and to extract a "desired channel is stripped from the main carrier". This is not the functionality or operations as performed by the modulator claimed in accordance with the subject matter as claimed by the Applicant.

Kummer's "tuner & demodulator 1" is not a modulator in accordance with the subject matter as claimed by the Applicant. Also, demodulation is not the same operation or process as modulation as known in the art to which the invention pertains. The Applicant respectfully asserts that one having skill in the art would understand the operation of Kummer's "tuner and demodulator 1" performs demodulation and decoding (i.e., it does NOT perform modulation). Also, the Applicant respectfully asserts that one having skill in the art would understand the operation of a demodulator is separate and distinct from that of a modulator (i.e., may be viewed as being an opposite or reverse type process when compared to the operation of a modulator).

In addition, the Examiner-identified Kummer's "tuner and demodulator 1" is not connected to the Examiner-identified Kummer's "Video DAC 7". There are multiple, distinct components interveningly coupled between Kummer's "tuner and demodulator 1" and Kummer's "Video DAC 7" (e.g., "Error Detection Correction & Packet Synchronization 2", "Packet Demultiplexer 3", "Video Decompressor 5"). At a

minimum, not only does Kummer's "tuner and demodulator 1" not perform any modulation (i.e., it instead performs demodulation, which is an opposite or reverse operation of modulation), but Kummer's "tuner and demodulator 1" also is structurally not connected to Kummer's "Video DAC 7".

Kummer's "Video DAC 7" operates directly on the decompressed and decoded signal output from Kummer's "Video Decompressor 5". There is no modulator interposed between the Kummer's "Video Decompressor 5" and Kummer's "Video DAC 7". Instead, Kummer's "Video DAC 7" operates directly on the signal output from Kummer's "Video Decompressor 5".

Kummer teaches and discloses:

"The video signal is then sent to the video decompressor 5 where the data is decompressed, decoded, ...." (Kummer, col. 3, lines 16-18, emphasis added)

"After decompression the digital signals are converted to analog baseband signals in the audio DAC (digital Analog Converter) 8 and the video DAC 9." (Kummer, col. 2, lines 49-51, emphasis added)

In other words, the decoding operation performed in Kummer (i.e., within Kummer's "Video Decompressor 5") generates a decompressed and decoded signal that is provided directly to "Video DAC 7". As such, in accordance with the teaching and disclosure of Kummer, the Applicant respectfully asserts that it would be inappropriate, unnecessary, and unneeded to provide for modulation of the signal that is provided from Kummer's "Video Decompressor 5" before it is provided to "Video DAC 7". In fact, the insertion of any modulator in between Kummer's "Video Decompressor 5" and Kummer's "Video DAC 7" is wholly unnecessary, as Kummer's "Video DAC 7" operates directly on decompressed and decoded signal that is provided from "Video DAC 7".

The Applicant also respectfully points out that the connection of the components in the Applicant's claimed subject matter is also different than the connection of the components identified by the Examiner in Shaffner and Kummer.

The Applicant claims subject matter including, among other subject matter limitations, a satellite receiver that is operative to decode the first signal having the first signal type; a modulator, connected to an output of the satellite receiver, that is operative



to modulate decoded output from the satellite receiver; and a DAC (Digital to Analog Converter), connected to an output of the modulator, that is operative to transform the second signal having the second signal type from a digital signal into an analog signal.

Kummer's "tuner & demodulator 1" is not connected to Kummer's "Video DAC 7" as explicitly shown in Kummer's FIG. 2.

Kummer's "tuner & demodulator 1" (that the Examiner equivalences with Applicant's claimed a modulator, connected to an output of the satellite receiver, that is operative to modulate decoded output from the satellite receiver) is not connected to Kummer's "Video DAC 7" (that the Examiner equivalences with Applicant's claimed DAC, connected to an output of the modulator, that is operative to transform the second signal having the second signal type from a digital signal into an analog signal).

On page 4 of the office action, the Examiner asserts that "It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the Digital to Analog Conversion teachings of Kummer with the transmodulation device of Schaffner allowing for improved coding efficiency and display of data."

The Applicant respectfully asserts that Kummer's "Video DAC 7" provides a signal directly compatible and adapted for connection TO TV MONITOR 9 as shown in Kummer's FIG. 1. However, Shaffner's MDU-IRD 32 (that is operative to generate a decoded signal) provides that decoded signal directly adapted and compatible to TELEVISION 40 via "an output 38 adapted for connection to a television set for selectively providing a particular television channel selected by a user ..." in Shaffner's FIG. 2.

In other words, the Applicant respectfully asserts that it is wholly unneeded to include any DAC (e.g., such as Kummer's "Video DAC 7") in between Shaffner's MDU-IRD 32 and the TELEVISION 40, because the very signal provided by Shaffner's MDU-IRD 32 (e.g., decoded signal) is already compatible and "adapted for connection to a television set".

As such, the Applicant respectfully disagrees with the Examiner's assertion that one ordinary skill in the art at the time the invention was made would combine the DAC teachings of Kummer with the transmodulation device of Schaffner, as the use of Kummer's "Video DAC 7" is wholly unneeded because the very signal provided by

Shaffner's MDU-IRD 32 (e.g., decoded signal) is already compatible and "adapted for connection to a television set".

The Applicant also respectfully asserts that the various cited references do not teach and disclose an externally located microcontroller or state machine that directs operation of a transcoder functional block in accordance with the subject matter as claimed by the Applicant (including the particular connectivity to other components [satellite receiver and modulator] within the Applicant's claimed subject matter).

The Applicant respectfully believes that the inclusion of Kummer fails to overcome the deficiencies of Schaffner.

The Applicant respectfully asserts that Schaffner, Kummer, when considered individually or together, fails to teach and disclose the subject matter as claimed by the Applicant in these claims.

In view of at least these comments made above, the Applicant respectfully believes that these independent claims rejected above are patentable over these cited references.

The Applicant respectfully believes that these dependent claims rejected above, being further limitations of the subject matter as claimed in allowable independent claims, respectively, are also allowable.

As such, the Applicant respectfully requests that the Examiner withdraw the rejections of these claims.

In the above-referenced office action, the Examiner asserts the following:

"14. Claims 2, 16, 17, 22, 69, 70, 76-77 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schaffner et al. US 6,104,908 in view of Kummer US 6,151,479 in view of Mogre et al. US 6,987,543 B1 further in view Tilford et al. US 5,915,020." (office action, Part of Paper No./Mail Date 20091030, p. 6)

The Applicant respectfully traverses.

With respect to independent claims 16 and 76, on page 7 of the office action, the Examiner asserts:

"16. As to claim 16, see discussion of claims 1 and 2 above for common subject matter.

...

21. As to claim 76, see the discussion of claim 22 above.”

The Applicant respectfully traverses.

The Applicant respectfully points out that Shaffner, Kummer, when considered individually or together, fail to teach and disclose the structure and connectivity of the Applicant’s transcoder functional block that includes a satellite receiver that is operative to decode the first signal having the first signal type; a modulator, connected to an output of the satellite receiver, that is operative to modulate decoded output from the satellite receiver; and a DAC (Digital to Analog Converter), connected to an output of the modulator, that is operative to transform the second signal having the second signal type from a digital signal into an analog signal.

The Applicant again respectfully asserts that any decoding in Shaffner is explicitly described as being performed in a component (i.e., “demodulator/demodulating means 30 or MDU-IRD 32” located within “dwelling 12”) that is separate and distinct from the “system 14” that includes Examiner-identified Shaffner’s transmodulator 22. Again, decoding in Shaffner is explicitly described as being performed in a component that is separate and distinct from the Examiner-identified Shaffner’s transmodulator 22.

Also, the Examiner-identified transmodulator 22 of Shaffner’s FIG. 2 does not perform encoding in accordance with the subject matter as claimed by the Applicant. The Applicant’s modulator is a singular component that is operative to perform encoding and modulation therein.

With respect to Kummer, Kummer’s “tuner & demodulator 1” is not a modulator in accordance with the subject matter as claimed by the Applicant. Also, demodulation is not the same operation or process as modulation as known in the art to which the invention pertains. The Applicant respectfully asserts that one having skill in the art would understand the operation of Kummer’s “tuner and demodulator 1” performed demodulation and decoding (i.e., does NOT perform modulation). Also, the Applicant respectfully asserts that one having skill in the art would understand the operation of a demodulator is separate and distinct from that of a modulator (i.e., may be viewed as being an opposite or reverse type process when compared to the operation of a modulator).

In addition, the Examiner-identified Kummer's "tuner and demodulator 1" is not connected to the Examiner-identified Kummer's "Video DAC 7". There are multiple, distinct components interveningly coupled between Kummer's "tuner and demodulator 1" and Kummer's "Video DAC 7" (e.g., "Error Detection Correction & Packet Synchronization 2", "Packet Demultiplexer 3", "Video Decompressor 5"). At a minimum, not only does Kummer's "tuner and demodulator 1" not perform any modulation (i.e., it instead performs demodulation, which is an opposite or reverse operation of modulation), but Kummer's "tuner and demodulator 1" is not structurally connected to Kummer's "Video DAC 7".

The Applicant also respectfully asserts that the various cited references do not teach and disclose an externally located microcontroller or state machine that directs operation of a transcoder functional block in accordance with the subject matter as claimed by the Applicant (including the particular connectivity to other components [satellite receiver and modulator] within the Applicant's claimed subject matter).

The Applicant respectfully asserts that independent claims 16 and 76 are allowable over Schaffner in view of Kummer.

The Applicant respectfully asserts that the inclusion of Mogre and further in view Tilford fails to overcome the deficiencies of Schaffner in view of Kummer.

The Applicant respectfully asserts that independent claims 16 and 76 are allowable over Schaffner in view of Kummer in view of Mogre and further in view Tilford.

In view of at least these comments made above, and for other reasons, the Applicant respectfully believes that these independent claims rejected above are patentable over these cited references.

The Applicant respectfully believes that these dependent claims rejected above, being further limitations of the subject matter as claimed in allowable independent claims, respectively, are also allowable.

As such, the Applicant respectfully requests that the Examiner withdraw the rejections of these claims.

In the above-referenced office action, the Examiner asserts the following:

“23. Claims 3, 23, 24, 29, 71, 80-81 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schaffner et al. US 6,104,908 in view of Kummer US 6,151,479 in view of Mogre et al. US 6,987,543 B1 further in view Eroz et al US 6,829,308 B2 further in view Santoru US 6,975,837 B1.” (office action, Part of Paper No./Mail Date 20091030, p. 8)

The Applicant respectfully traverses.

The Applicant respectfully traverses.

With respect to independent claims 23 and 80, on page 9 and 10 of the office action, the Examiner asserts:

“25. As to claim 23, see the discussion of claim 3 above.

...

30. As to claim 80, see the discussion of claim 3 above.”

The Applicant respectfully points out that Schaffner, Kummer, when considered individually or together, fail to teach and disclose the structure and connectivity of the Applicant’s transcoder functional block that includes a satellite receiver that is operative to decode the first signal having the first signal type; a modulator, connected to an output of the satellite receiver, that is operative to modulate decoded output from the satellite receiver; and a DAC (Digital to Analog Converter), connected to an output of the modulator, that is operative to transform the second signal having the second signal type from a digital signal into an analog signal.

The Applicant again respectfully asserts that any decoding in Shaffner is explicitly described as being performed in a component (i.e., “demodulator/demodulating means 30 or MDU-IRD 32” located within “dwelling 12”) that is separate and distinct from the “system 14” that includes Examiner-identified Shaffner’s transmodulator 22. Again, decoding in Shaffner is explicitly described as being performed in a component that is separate and distinct from the Examiner-identified Shaffner’s transmodulator 22.

Also, the Examiner-identified transmodulator 22 of Shaffner’s FIG. 2 does not perform encoding in accordance with the subject matter as claimed by the Applicant. The Applicant’s modulator is a singular component that is operative to perform encoding and modulation therein.

With respect to Kummer, Kummer's "tuner & demodulator 1" is not a modulator in accordance with the subject matter as claimed by the Applicant. Also, demodulation is not the same operation or process as modulation as known in the art to which the invention pertains. The Applicant respectfully asserts that one having skill in the art would understand the operation of Kummer's "tuner and demodulator 1" performed demodulation and decoding (i.e., does NOT perform modulation). Also, the Applicant respectfully asserts that one having skill in the art would understand the operation of a demodulator is separate and distinct from that of a modulator (i.e., may be viewed as being an opposite or reverse type process when compared to the operation of a modulator).

In addition, the Examiner-identified Kummer's "tuner and demodulator 1" is not connected to the Examiner-identified Kummer's "Video DAC 7". There are multiple, distinct components interveningly coupled between Kummer's "tuner and demodulator 1" and Kummer's "Video DAC 7" (e.g., "Error Detection Correction & Packet Synchronization 2", "Packet Demultiplexer 3", "Video Decompressor 5"). At a minimum, not only does Kummer's "tuner and demodulator 1" not perform any modulation (i.e., it instead performs demodulation, which is an opposite or reverse operation of modulation), but Kummer's "tuner and demodulator 1" is structurally not connected to Kummer's "Video DAC 7".

The Applicant also respectfully asserts that the various cited references do not teach and disclose an externally located microcontroller or state machine that directs operation of a transcoder functional block in accordance with the subject matter as claimed by the Applicant (including the particular connectivity to other components [satellite receiver and modulator] within the Applicant's claimed subject matter).

The Applicant respectfully asserts that independent claims 23 and 80 are allowable over Schaffner in view of Kummer.

The Applicant respectfully asserts that the inclusion of Mogre in view of Eroze and further in view of Santoru fails to overcome the deficiencies of Schaffner in view of Kummer.

The Applicant respectfully asserts that independent claims 23 and 80 are allowable over Schaffner in view of Kummer in view of Mogre in view of Eroz and further in view Santoru.

The Applicant respectfully asserts that Schaffner, Kummer, Mogre, Eroz, Santoru, when considered individually or together, fails to teach and disclose the subject matter as claimed by the Applicant in these claims.

In view of at least these comments made above, and for other reasons, the Applicant respectfully believes that these independent claims rejected above are patentable over these cited references.

The Applicant respectfully believes that these dependent claims rejected above, being further limitations of the subject matter as claimed in allowable independent claims, respectively, are also allowable.

As such, the Applicant respectfully requests that the Examiner withdraw the rejections of these claims.

In the above-referenced office action, the Examiner asserts the following:

“32. Claims 7, 8, and 74-75 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schaffner et al. US 6,104,908 in view of Kummer US 6,151,479 in view of Block et al. US 5,774,497 further in view Bertram et al. US 6,996,098 B2.” (office action, Part of Paper No./Mail Date 20091030, p. 10)

The Applicant respectfully traverses.

The Applicant respectfully asserts that independent claims 1 and 68 are allowable over Schaffner in view of Kummer.

The Applicant respectfully asserts that independent claims 1 and 68 are also allowable over Schaffner in view of Kummer in view of Block and further in view of Bertram.

The Applicant respectfully believes that the inclusion of Block, Bertram fails to overcome the deficiencies of Schaffner in view of Kummer.

The Applicant respectfully asserts that Schaffner, Kummer, Block, Bertram, when considered individually or together, fails to teach and disclose the subject matter as claimed by the Applicant in these claims.

The Applicant also respectfully believes that these dependent claims rejected above, being further limitations of the subject matter as claimed in allowable independent claims, respectively, are also allowable.

As such, the Applicant respectfully requests that the Examiner withdraw the rejections of these claims.

In the above-referenced office action, the Examiner asserts the following:

“37. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schaffner et al. US 6,104,908 in view of Kummer US 6,151,479 further in view of Bellwood et al. US 6,401,132 B1.” (office action, Part of Paper No./Mail Date 20091030, p. 12)

The Applicant respectfully traverses.

The Applicant respectfully asserts that independent claim 1 is allowable over Schaffner in view of Kummer.

The Applicant respectfully asserts that independent claim 1 is also allowable over Schaffner in view of Kummer in view of Bellwood.

The Applicant respectfully believes that the inclusion of Bellwood fails to overcome the deficiencies of Schaffner in view of Kummer.

The Applicant respectfully asserts that Schaffner, Kummer, Bellwood, when considered individually or together, fails to teach and disclose the subject matter as claimed by the Applicant in these claims.

The Applicant also respectfully believes that this dependent claim rejected above, being a further limitation of the subject matter as claimed in an allowable independent claim, is also allowable.

As such, the Applicant respectfully requests that the Examiner withdraw the rejections of these claims.

In the above-referenced office action, the Examiner asserts the following:

“39. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schaffner et al. US 6,104,908 in view of Kummer US 6,151,479 in view of Mogre et al.



US 6,987,543 B1 further in view of Tomasz et al. US 6,031,878 in view of Kummer US 6,151,479.” (office action, Part of Paper No./Mail Date 20091030, p. 13)

The Applicant respectfully traverses.

The Applicant respectfully asserts that independent claim 1 is allowable over Schaffner in view of Kummer.

The Applicant respectfully asserts that independent claim 1 is also allowable over Schaffner in view of Kummer in view of Mogre in view of Tomasz and further in view of Kummer.

The Applicant respectfully believes that the inclusion of Mogre, Tomasz fails to overcome the deficiencies of Schaffner in view of Kummer.

The Applicant respectfully asserts that Schaffner, Kummer, Mogre, Tomasz, when considered individually or together, fails to teach and disclose the subject matter as claimed by the Applicant in these claims.

The Applicant also respectfully believes that this dependent claim rejected above, being a further limitation of the subject matter as claimed in an allowable independent claim, is also allowable.

As such, the Applicant respectfully requests that the Examiner withdraw the rejection of this claim.

In the above-referenced office action, the Examiner asserts the following:

“41. Claims 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schaffner et al. US 6,104,908 in view of Kummer US 6,151,479 in view of Mogre et al. US 6,987,543 B1 further in view of Tomasz et al. US 6,031,878 in view of Kummer US 6,151,479 further in view of Gurantz et al. US 7,130,576.” (office action, Part of Paper No./Mail Date 20091030, p. 16)

The Applicant respectfully traverses.

The Applicant respectfully asserts that independent claim 1 is allowable over Schaffner in view of Kummer.

The Applicant respectfully asserts that independent claim 1 is also allowable over Schaffner in view of Kummer in view of Mogre and further in view of Tomasz and further in view of Gurantz.

The Applicant respectfully believes that the inclusion of Mogre, Tomasz, Gurantz fails to overcome the deficiencies of Schaffner in view of Kummer.

The Applicant respectfully asserts that Schaffner, Kummer, Mogre, Tomasz, Gurantz, when considered individually or together, fails to teach and disclose the subject matter as claimed by the Applicant in these claims.

The Applicant also respectfully believes that these dependent claims rejected above, being a further limitation of the subject matter as claimed in an allowable independent claim, are also allowable.

As such, the Applicant respectfully requests that the Examiner withdraw the rejection of these claims.

In the above-referenced office action, the Examiner asserts the following:

“45. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schaffner et al. US 6,104,908 in view of Kummer US 6,151,479 in view of Mogre et al. US 6,987,543 B1 further in view of Tilford et al. US 5,915,020 further in view of Tomasz et al. US 6,031,878.” (office action, Part of Paper No./Mail Date 20091030, p. 17)

The Applicant respectfully traverses.

The Applicant respectfully asserts that independent claim 16 is allowable over Schaffner in view of Kummer in view of Mogre and further in view Tilford.

The Applicant respectfully asserts that independent claim 16 is also allowable over Schaffner in view of Kummer in view of Mogre and in view Tilford and further in view of Tomasz.

The Applicant respectfully believes that the inclusion of Tomasz, fails to overcome the deficiencies of Schaffner in view of Kummer in view of Mogre and further in view Tilford.

The Applicant respectfully asserts that Schaffner, Kummer, Mogre, Tilford, Tomasz, when considered individually or together, fails to teach and disclose the subject matter as claimed by the Applicant in this claim.

The Applicant also respectfully believes that this dependent claim rejected above, being a further limitation of the subject matter as claimed in an allowable independent claim, is also allowable.

As such, the Applicant respectfully requests that the Examiner withdraw the rejection of this claim.

In the above-referenced office action, the Examiner asserts the following:

“47. Claims 19-21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schaffner et al. US 6,104,908 in view of Kummer US 6,151,479 in view of Mogre et al. US 6,987,543 B1 further in view of Tilford et al. US 5,915,020 in view of Tomasz et al. US 6,031,878 further in view of Gurantz et al. US 7,130,576 B1.” (office action, Part of Paper No./Mail Date 20091030, p. 18-19)

The Applicant respectfully traverses.

The Applicant respectfully asserts that independent claim 16 is allowable over Schaffner in view of Kummer in view of Mogre and further in view Tilford.

The Applicant respectfully asserts that independent claim 16 is also allowable over Schaffner in view of Kummer in view of Mogre and in view Tilford in view of Tomasz and further in view Gurantz.

The Applicant respectfully believes that the inclusion of Tomasz, Gurantz fails to overcome the deficiencies of Schaffner in view of Kummer in view of Mogre and further in view Tilford.

The Applicant respectfully asserts that Schaffner, Kummer, Mogre, Tilford, Tomasz, Gurantz when considered individually or together, fails to teach and disclose the subject matter as claimed by the Applicant in these claims.

The Applicant also respectfully believes that these dependent claims rejected above, being further limitations of the subject matter as claimed in an allowable independent claim, are also allowable.

As such, the Applicant respectfully requests that the Examiner withdraw the rejection of these claims.

In the above-referenced office action, the Examiner asserts the following:

“51. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schaffner et al. US 6,104,908 in view of Kummer US 6,151,479 in view of Mogre et al. US 6,987,543 B1 further in view of Eroz et al. US 6,829,308 B2 in view of Santoru US

6,975,837 B1 further in view of Tomasz et al. US 6,031,878.” (office action, Part of Paper No./Mail Date 20091030, p. 20)

The Applicant respectfully traverses.

The Applicant respectfully asserts that independent claim 23 is allowable over Schaffner in view of Kummer in view of Mogre in view of Eroz and in view Santoru.

The Applicant respectfully asserts that independent claim 23 is also allowable over Schaffner in view of Kummer in view of Mogre in view of Eroz and in view Santoru and further in view Tomasz.

The Applicant respectfully believes that the inclusion of Tomasz fails to overcome the deficiencies of Schaffner in view of Kummer in view of Mogre in view of Eroz and in view Santoru.

The Applicant respectfully asserts that Schaffner, Kummer, Mogre, Eroz, Santoru, Tomasz when considered individually or together, fails to teach and disclose the subject matter as claimed by the Applicant in this claim.

The Applicant also respectfully believes that this dependent claim rejected above, being a further limitation of the subject matter as claimed in an allowable independent claim, is also allowable.

As such, the Applicant respectfully requests that the Examiner withdraw the rejection of this claim.

In the above-referenced office action, the Examiner asserts the following:

“53. Claims 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schaffner et al. US 6,104,908 in view of Kummer US 6,151,479 in view of Mogre et al. US 6,987,543 B1 further in view of Eroz et al. US 6,829,308 B2 in view of Santoru US 6,975,837 B1 in view of Tomasz et al. US 6,031,878 further in view of Gurantz et al US 7,130,576 B1.” (office action, Part of Paper No./Mail Date 20091030, p. 21)

The Applicant respectfully traverses.

The Applicant respectfully asserts that independent claim 23 is allowable over Schaffner in view of Kummer in view of Mogre in view of Eroz and in view Santoru.

The Applicant respectfully asserts that independent claim 23 is also allowable over Schaffner in view of Kummer in view of Mogre in view of Eroz and in view Santoru in view Tomasz and further in view Guarantz.

The Applicant respectfully believes that the inclusion of Tomasz, Guarantz fails to overcome the deficiencies of Schaffner in view of Kummer in view of Mogre in view of Eroz and in view Santoru.

The Applicant respectfully asserts that Schaffner, Kummer, Mogre, Eroz, Santoru, Tomasz, Guarantz when considered individually or together, fails to teach and disclose the subject matter as claimed by the Applicant in these claims.

The Applicant also respectfully believes that these dependent claims rejected above, being a further limitation of the subject matter as claimed in an allowable independent claim, are also allowable.

As such, the Applicant respectfully requests that the Examiner withdraw the rejection of these claims.

In the above-referenced office action, the Examiner asserts the following:

“57. Claims 78-79 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schaffner et al. US 6,104,908 in view of Kummer US 6,151,479 in view of Mogre et al. US 6,987,543 B1 further in view of Tilford et al. US 5,915,020 in view of Block et al. US 5,774,497 further in view of Bertram et al. US 6,996,098 B2.” (office action, Part of Paper No./Mail Date 20091030, p. 23)

The Applicant respectfully traverses.

The Applicant respectfully asserts that independent claim 76 is allowable over Schaffner in view of Kummer in view of Mogre and further in view Tilford.

The Applicant respectfully asserts that independent claim 76 is also allowable over Schaffner in view of Kummer in view of Mogre in view of Tilford in view of Block in and further view of Bertram.

The Applicant respectfully believes that the inclusion of Block, Bertram, fails to overcome the deficiencies of Schaffner in view of Kummer in view of Mogre and further in view Tilford.

The Applicant respectfully asserts that Schaffner, Kummer, Mogre, Tilford, Block, Bertram, when considered individually or together, fails to teach and disclose the subject matter as claimed by the Applicant in these claims.

The Applicant also respectfully believes that these dependent claims rejected above, being a further limitation of the subject matter as claimed in an allowable independent claim, are also allowable.

As such, the Applicant respectfully requests that the Examiner withdraw the rejection of these claims.

In the above-referenced office action, the Examiner asserts the following:

“60. Claims 82-83 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schaffner et al. US 6,104,908 in view of Mogre et al. US 6,987,543 B1 in view of Kummer US 6,151,479 in view of Eroz et al. US 6,829,308 B2 in view of Block et al. US 5,774,497 in view Santoru US 6,975,837 B1 further in view of Bertram et al. US 6,996,098 B2.” (office action, Part of Paper No./Mail Date 20091030, p. 24-25)

The Applicant respectfully traverses.

The Applicant respectfully asserts that independent claim 80 is allowable over Schaffner in view of Kummer in view of Mogre in view of Eroz and further in view Santoru.

The Applicant respectfully asserts that independent claim 80 is also allowable over Schaffner in view of Mogre in view of Kummer in view of Eroz in view of Block in view Santoru further in view of Bertram.

The Applicant respectfully believes that the inclusion of Mogre, Block, Bertram fails to overcome the deficiencies of Schaffner in view of Kummer in view of Mogre in view of Eroz and further in view Santoru.

The Applicant respectfully asserts that Schaffner, Mogre, Kummer, Eroz, Block, Santoru, Bertram when considered individually or together, fails to teach and disclose the subject matter as claimed by the Applicant in these claims.

The Applicant also respectfully believes that these dependent claims rejected above, being a further limitation of the subject matter as claimed in an allowable independent claim, are also allowable.

As such, the Applicant respectfully requests that the Examiner withdraw the rejection of these claims.

The Applicant respectfully believes that the pending claims are in condition for allowance and respectfully requests that they be passed to allowance.

The Examiner is invited to contact the undersigned by telephone or facsimile if the Examiner believes that such a communication would advance the prosecution of the present U.S. utility patent application.

RESPECTFULLY SUBMITTED,  
By:                     /SXShort/ Reg. No. 45,105                      
Shayne X. Short, Ph.D., Reg. No. 45,105  
Direct Phone: (512) 825-1145  
Direct Fax No. (888) 800-6752

GARLICK HARRISON & MARKISON  
ATTORNEYS AT LAW  
P.O. Box 160727  
AUSTIN, TEXAS 78716-0727  
TELEPHONE (512) 825-1145 / FACSIMILE (888) 800-6752 or (888) 456-7824